#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: <u>69.28</u>

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter Report No: WIR-018923

Address: 333 Burma Road Date Inspected: 29-Dec-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder( OBG)

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD** 

WELDING:

Segment 12AW ~ 12BW (Base metal Repair)

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3004V-051; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; The Critical Welding Repair Report (CWRR) was B-CWR2129. ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 12AE ~ 12BE

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12-002; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; The Welding Repair Report (WRR) was B-WR17901. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 12AE ~ 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12-003; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; The Welding Repair Report (WRR) was B-WR19643. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

Segment 12AW ~ 12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP3049-001-054; located On Orthotropic Box Girder (OBG) Corner Assembly I-Rib to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1

NDT:

Segment 12AE ~ 12BE (T-Rib Hold Back)

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

BP3003-001-059, 060 BP3006-001-017, 018 BP3005-001-021, 022 BP3002-001-063, 064

Nondestructive testing (NDT) notification No.07974.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)





## **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

| Inspected By: | Prabhune, Manoj | Quality Assurance Inspector |
|---------------|-----------------|-----------------------------|
| Reviewed By:  | Peterson,Art    | QA Reviewer                 |